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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KIM, WESLEY LEO

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/784,743	Applicant(s) SYLVAIN, DANY	
	Examiner WESLEY L. KIM	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 30-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 30-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/3/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/29/08 has been entered.

Response to Amendment

This Office Action is in response to Amendment filed 4/29/08.

- Claims 1-4, 6-12, 14, 31-33, 35-41, and 43 are currently amended.
- Claims 1-15 and 30-44 are currently pending in this Office Action.

Response to Arguments

Applicant's arguments with respect to claims 1-15 and 30-34 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claim 1-2, 7-15 and 30-31, 36-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Kallio (U.S. Pub 2002/0147008 A1).

Regarding Claims 1 and 30, Kallio teaches a method of transitioning a call with a mobile terminal from a cellular connection to a local wireless connection (Par.43;1-4) the method comprising:

a) receiving an inter-switch handoff request from a wireless switch (Par.49;1-4 and Par.30:lines 16-19 and Par.31, WMC receives handoff request from BSC 114, i.e. wireless switch. The handoff request is causing handover from the wireless switch BSC 114 to the MTS switch, so it is a inter-switch handoff) supporting a call to the mobile terminal over a cellular access network (Par.43;lines 6-8), the call comprising a first connection from the wireless switch to the mobile terminal (Par.43;1-4 and Fig.4; initially the wireless switch, i.e. BSC 114, is connected to the mobile terminal 150) and a second connection between the wireless switch and an entity (Par.24;30-35 and Par.6:lines 9-13, mobile station 150 is obviously in a conversation with another entity, which is the second connection);

b) effecting establishment of an inter-switch handoff connection to the mobile terminal via a terminal adaptor (Fig.4:210), which supports local wireless communications with the mobile terminal (Par.43;13-16 and connection between Fig.4:210 and Fig.4:150, WLAN cell broadcasts local wireless communications via the terminal adaptor, i.e. WMC, to the mobile station); and

c) providing an inter-switch handoff instruction to the wireless switch to connect the second connection and the inter-switch handoff connection to effect handoff of the call from the cellular connection to the local wireless connection (Par.50;5-7 and Par.50;12-15, handoff instructions are sent to a mobile station via the BSC 114 to connect the second and inter-switch handoff connections to effect handoff).

Regarding Claims 2 and 31, Kallio further teaches the inter-switch handoff connection is established in part between a wireline switch (Par.31:lines 16-19 and Par.31, MTS is a wireline switch) and the terminal adaptor (Fig.1;210 WMC is a WLAN access point).

Regarding Claims 7 and 36, Kallio further teaches the inter-switch handoff connection is established in part over a packet network operatively coupled to the terminal adaptor (Par.33; Packet network coupled to the terminal adaptor).

Regarding Claims 8 and 37, Kallio further teaches the inter-switch handoff request is received and the inter-switch handoff instruction is provided using a cellular protocol (Par.49 and Table in pg.6 #4, BSC indicates handover) while the establishment of the inter-switch handoff connection is effected using a packet-based communication session protocol (Par.50;14-15, when WLAN is used packet protocols are used).

Regarding Claims 9 and 38, Kallio further teaches the inter-switch handoff connection is established in part between a first media gateway (Fig.4;310) and the mobile terminal (Fig.1;150) through the terminal adaptor (Fig.1;210, WLAN access

point), the first media gateway connected to the wireless switch via a cellular-based trunk (Fig.4; the gateway 310 is connected to the wireless switch BSC 114), the method further comprising sending control messages to the first media gateway and the mobile terminal to establish the inter-switch handoff connection (Par.49; handover request sent via gateway to establish the inter-switch handoff connection).

Regarding Claims 10 and 39, Kallio further teaches the first media gateway facilitates inter-working between the cellular-based trunk and a packet-based session forming part of the inter-switch handoff connection (Par.49;1-4, AGW and Fig.4;310, the gateway facilitates inter-working between the cellular-based trunk (i.e. MSC) and a packet-based session forming part (Fig.4;230) of the inter-switch handoff connection).

Regarding Claims 11 and 40, Kallio further teaches providing a inter-switch handoff message to the wireless switch to confirm handoff to the inter-switch handoff connection (Par.50;11-12).

Regarding Claim 12-15 and 41-44, Kallio further teaches the inter-switch handoff request comprises a cell site identifier to which the wireless switch is attempting to handoff the call (Par.46;7-11 and Par.47;1-8, when a handover is desired, the list of undesired cell identifiers are dropped from the measurement reports, so only the desired cell identifier remains), the cell site identifier corresponding to the terminal adaptor (Fig.1;210, the terminal adaptor, i.e. WLAN access point, is within the cell site).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kallio (U.S. Pub 2002/0147008 A1) in view of Byrne (U.S. Patent 5737703).

Regarding Claims 3 and 32, Kallio teaches all the limitations as recited in Claims 2 and 31, and Kallio further teaches the handoff request is received and the handoff instructions are provided using a cellular protocol (Par.49 and Par.50;1-4) however Kallio **is silent on** while the establishment of the inter-switch handoff connection is effected using a public switched telephone network-based protocol.

Byrne teaches that a cellular and another wireless communication system can use a public switched telephone network-based protocol to effect establishment of the inter-switch handoff connection (Col.8;19-31 and Col.7;19-29). To the examiner, a WLAN and DECT communications systems are wireless systems, and with the combination of Kallio and Byrne, it would be obvious to one of ordinary skill in the art it envision handing off communications from a cellular communication system to another wireless communications system, according to Kallios teachings.

To one of ordinary skill in the art, it would have been obvious to modify Kallio with Byrne at the time of the invention such that the establishment of the inter-switch handoff connection is effected using a public switched telephone network-based

protocol, to provide a method of handing off communications from a cellular network to another wireless network (i.e. DECT) so that a user is not inconvenienced by poor reception or any interruption in service.

3. Claims 4-5 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kallio (U.S. Pub 2002/0147008 A1) in view of Jawanda (U.S. Patent 6243581 B1).

Regarding Claims 4-5 and 33-34, Kallio teaches all the limitations as recited in claims 2 and 31, and Kallio further teaches that there is a first media gateway (Fig.4;310) connected to the wireless switch via a cellular based trunk, however Kallio **is silent on** a second media gateway connected to the wireline switch via a public switched telephone network based trunk, the method further comprising sending call initiation messages to the first and second media gateways and the wireline switch to establish the inter-switch handoff connection.

Jawanda teaches that there is a second media gateway connected to the wireline switch via a public switched telephone network based trunk (Col.2;44-47, Fig.1;13 and Fig.1;22, PSTN or IP trunk is connected to the second gateway).

Kallio teaches that a call initiation message is sent along the path from the serving network to the target network (Par.49-50), so to a skilled artisan it would be obvious to do the same in the communication network of Jawanda such that the message would pass through the first and second gateway and the wireline switch to establish the inter-switch handoff connection.

To one of ordinary skill in the art, it would have been obvious to modify Kallio with Jawanda at the time of the invention such that, a second media gateway connected to the wireline switch via a public switched telephone network based trunk, the method further comprising sending call initiation messages to the first and second media gateways and the wireline switch to establish the inter-switch handoff connection, to provide a method for the gateways to convert the messages into the correct format before transmitting them to the other network so that the communications between the originator and the destination can remain stable and reliable throughout the handoff process.

4. Claims 6 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kallio (U.S. Pub 2002/0147008 A1) in view of Salmela et al (U.S. Patent 6181938 B1).

Regarding Claims 6 and 35, Kallio teaches all the limitations as recited in claims 2 and 31, however Kallio **is silent on** the inter-switch handoff connection is established using a directory number associated with the mobile terminal when supported via the terminal adaptor.

Salmela teaches that it is well known in the art to use one primary number (i.e. mobile directory number) regardless of whether the terminal is located in one network or another (Abstract). To a skilled artisan it is obvious that the inter-switch handoff connection would be established using the directory number of the mobile terminal when supported via the terminal adaptor.

To one of ordinary skill in the art, it would have been obvious to modify Kallio with Salmela at the time of the invention, such that the inter-switch handoff connection is established using a directory number associated with the mobile terminal when supported via the terminal adaptor, to provide a method where a mobile terminal can roam between different networks that support subscriber mobility, which allows a call to be routed to the called subscriber terminal in the respective network.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WESLEY L. KIM whose telephone number is (571)272-7867. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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